WHAT IS CLAIMED IS:

1.   A disk array system having at least one computer and a disk array apparatus to be used by the computer, the disk array apparatus having a plurality of disk apparatuses and a plurality of controllers each having a dedicated cache, wherein:

said controller comprises configuration management means for managing configuration information of logical units formed for the disk apparatus, said configuration management means rewrites the configuration information of the logical units in accordance with control information to perform a take-over process of switching a desired logical unit or units under control of one controller to another desired controller or controllers.

2.   A disk array system according to claim 1, wherein said configuration management means designates a subject logical unit and a switch-destination controller in response to information of designating migration of logical units between the controllers.

3.   A disk array system according to claim 1, wherein a connection port number of a switch-destination controller or a logical unit number of a logical unit to be recognized by the computer is changed in response to information of designating migration of logical units between the controllers.

4.   A disk array system according to claim 1, wherein a switch-source controller writes data of a

subject logical unit on the cache into the disk in response to information of designating migration of logical units between the controllers.

5.   A disk array system according to claim 4, wherein writing data on the cache is performed by a write instruction command contained in the control information.

6.   A disk array system according to claim 1, wherein said configuration management means performs a logical unit automatic take-over by storing information of a switch-destination controller.

7.   A take-over method for logical units between controllers in a disk array system having at least one or a plurality of computers and a disk array apparatus to be used by the computer, the disk array apparatus having a plurality of disk apparatuses and a plurality of controllers each having a dedicated cache, the method comprises the steps of:

          making the controller manage configuration information of logical units formed for the disk apparatus; and

          by rewriting the configuration information of the logical units in accordance with control information, performing a take-over process of switching a desired logical unit or units under control of one controller to another desired controller or controllers.

8.   A take-over method for logical units between

controllers according to claim 7, wherein a switch-source controller writes data of a subject logical unit on the cache into the disk in response to information of designating migration of logical units between the controllers.

9.   A disk array apparatus to be used by at least one external computer, the disk array apparatus having a plurality of controllers each having a dedicated cache and a plurality of disk apparatuses connectable to the controllers, wherein:

each of the plurality of controllers includes configuration management means for managing configuration information of logical units formed in the disk apparatus, and said configuration management means includes migrating means having a function of changing the configuration of the logical unit in accordance with control information, and said migrating means migrates a desired logical unit under control of one controller to another desired controller in accordance with the configuration information of the changed configuration.

10.   A disk array apparatus according to claim 9, wherein said configuration management means includes a rewritable configuration table for registering a switch-source and a switch-destination of each logical unit in accordance with the control information, and said configuration management means reconfigures the logical unit configuration of its own controller in

accordance with the configuration information in said configuration table.

11.   A disk array apparatus according to claim 9, wherein a disk array system including the disk array apparatus and the external computer includes a system management unit, and the system management system generates the control information and supplies the control information to the disk array apparats.

12.   A disk array apparatus according to claim 9, wherein the disk array apparatus generates the control information and supplies the control information to said configuration management means.

13.   A disk array apparatus according to claim 9, wherein the control information contains information of designating a switch-source controller managing a logical unit to be migrated and a switch-destination controller.

14.   A disk array apparatus according to claim 9, wherein at least one of the plurality of controllers has a backup function and a function of becoming a switch-destination of a logical unit under management by another controller.